

SAMPLE PAPER SYLLABUS 2023-24





CLASS

6

SOF INTERNATIONAL

MATHEMATICS OLYMPIAD

Total Questions : 50				nme : i m.					
PATTERN & MARKING SCHEME									
Section	(1) Logical Reasoning	(2) Mathematical Reasoning	(3) Everyday Mathematics	(4) Achievers Section					
No. of Questions	15	20	10	5					
Marks per Ques.	1	1	1	3					

SYLLABUS

Section – 1: Verbal and Non-Verbal Reasoning.

Section – 2: Knowing Our Numbers, Whole Numbers, Playing with Numbers, Basic Geometrical Ideas, Understanding Elementary Shapes, Integers, Fractions, Decimals, Data Handling, Mensuration, Algebra, Ratio and Proportion, Symmetry, Practical Geometry.

Section -3: Syllabus as per Section -2.

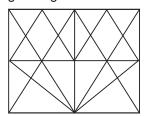
Section -4: Higher Order Thinking Questions - Syllabus as per Section -2.

LOGICAL REASONING

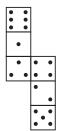
1. Find the next term in the series given below.

3F, 6G, 11I, 18L, ?

- (A) 210
- (B) 25N
- (C) 27P
- (D) 27Q
- Find the minimum number of straight lines required to draw the given figure.



- (A) 15
- (B) 16
- (C) 14
- (D) 17
- **3.** How many dots lie opposite to the face having four dots, when the given net of cube is folded?



- (A) 2
- (B) 1
- (C) 5
- (D) 6

MATHEMATICAL REASONING

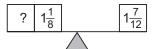
The given table shows the temperature of a city for 7 consecutive hours.

Hour	1	2	3	4	5	6	7
Temperature (°C)	-6	15	-2	23	12	0	-4

Calculate the difference between the highest and the lowest temperature of the city over the 7 hour period.

- (A) 17°C
- (B) 29°C
- (C) 21°C
- (D) 25°C

5. To balance the scale, find the missing fraction.



- (A) $\frac{11}{24}$
- (B) $\frac{10}{24}$
- (C) $\frac{5}{24}$
- (D) $\frac{1}{24}$
- Evaluate :

$$-1 + 55 - (-29) + (-1) - (-82) + (-3)$$

- (A) 161
- (B) 161
- (C) 158
- (D) 158

EVERYDAY MATHEMATICS

- 7. On a hill, the temperature at 8 p.m. was 2°C but at the mid-night of the same day, it fell down to -3°C. By how many degrees did the temperature fall?
 - (A) 6°C
- (B) 5°C
- (C) 2°C
- (D) 3°C

- 8. Vishal jogged around a rectangular field 4 times. If the rectangular field was 135 m long and 78 m wide, then how far did Vishal jog?
 - (A) 426 m
- (B) 852 m
- (C) 1278 m
- (D) 1704 m

ACHIEVERS SECTION

- 9. Figure P is made up of six identical squares. Two squares were removed from figure P to form figure Q. The perimeter of figure P is 240 cm. What is the perimeter of figure Q?
 - (A) 220 cm
 - (B) 180 cm
 - (C) 200 cm
 - (D) 160 cm





- **10.** Find the value of $\left(\frac{P+Q}{R}\right) \times S$.
 - (i) 100 lakhs = Q millions
 - (ii) R crores = 100 millions
 - (iii) 100 thousands = P lakhs
 - (iv) 10 crores = <u>S</u> millions
 - (A) 10
- (B) 100
- (C) 110
- (D) 1

SPACE FOR ROUGH WORK